

RoHS Compliant Product
A suffix of "-C" specifies halogen free

TO-277B

FEATURES

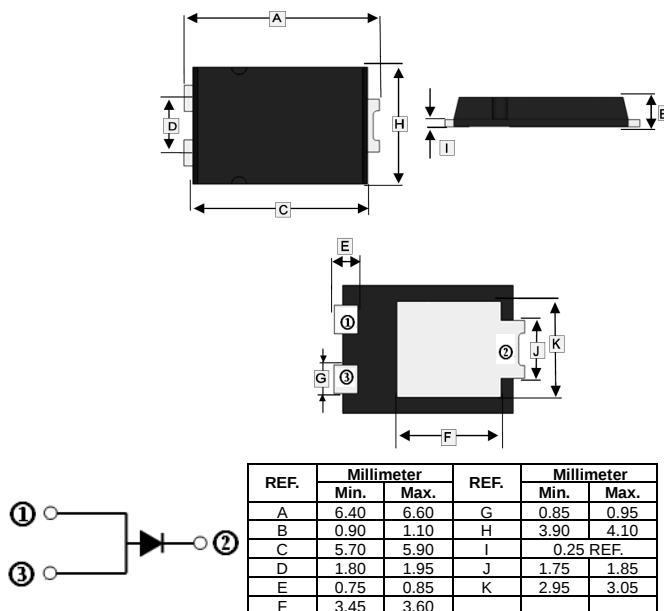
- Trench Barrier Schottky technology
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

MECHANICAL DATA

- Case: TO-277B molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: ANY

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-277B	3K	13 inch



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RSM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	10	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	I_{FSM}	150	A
Voltage Rate of Change (Rated V_R)	dv/dt	10000	V / μs
Thermal Resistance Junction to Case ¹	$R_{\theta JC}$	7	°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-40~150	°C

Note:

1. FR4 Board Heat sink size: 10*10*0.2mm.

ELECTRICAL CHARACTERISTICS

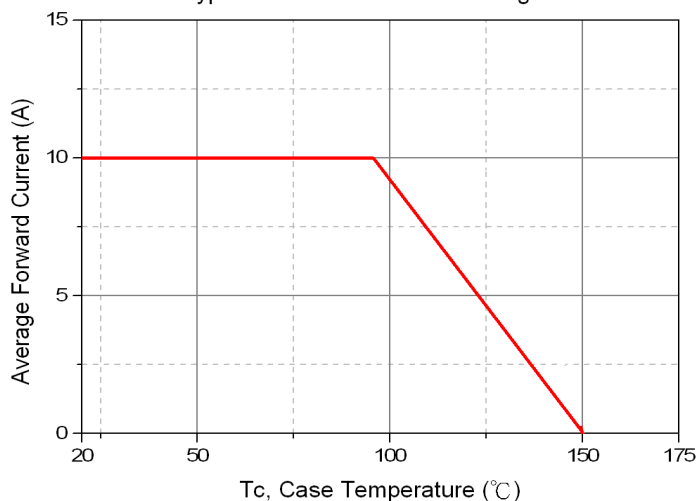
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.48	0.52	V	$I_F = 3A, T_J = 25^\circ C$
		0.54	0.58		$I_F = 5A, T_J = 25^\circ C$
		0.69	0.72		$I_F = 10A, T_J = 25^\circ C$
		0.63	-		$I_F = 10A, T_J = 125^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage ²	I_R	-	0.1	mA	$T_J = 25^\circ C$
		-	10		$T_J = 100^\circ C$
Typical Junction Capacitance ¹	C_J	470	-	pF	

NOTES:

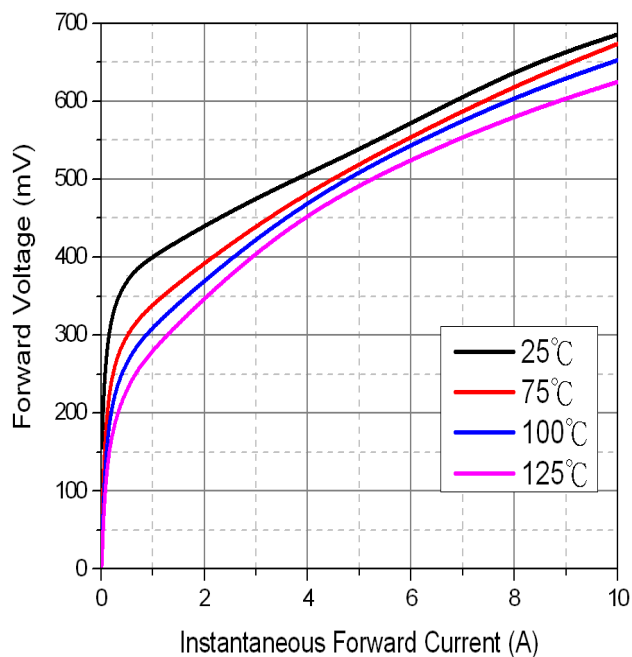
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

RATINGS AND CHARACTERISTIC CURVES

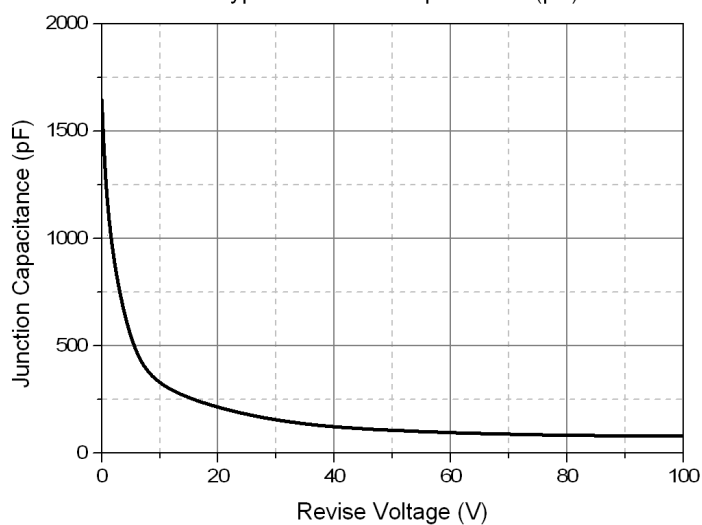
Typical Forward Current Derating Curve



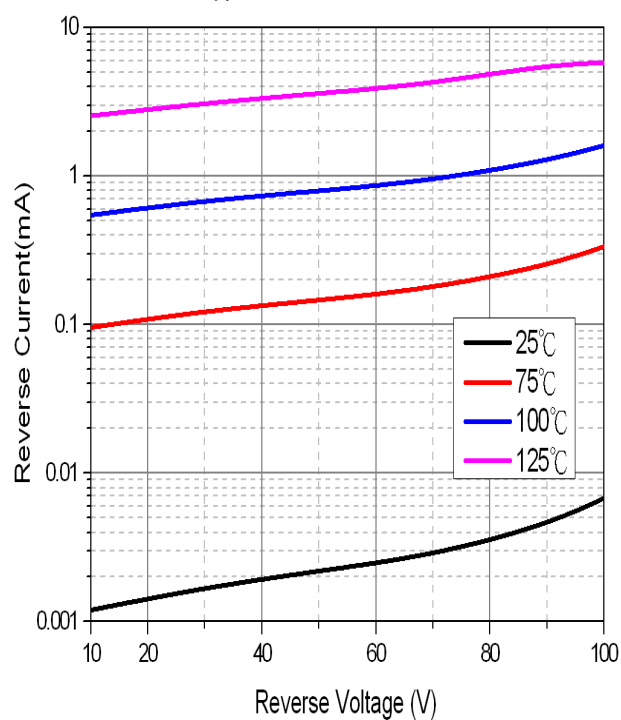
Typical Forward Characteristic



Typical Junction Capacitance (pF)



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

